

Changing the Game of Electric Actuation



Test Your Exlar Trivia Knowledge



Inverted Roller Screw

Q. What was the primary motivation for developing an electric actuator with a built-in inverted roller screw?

A. As a hydraulic cylinder replacement

Manufacturers needed improved actuation products providing better positioning, higher efficiencies, and superior performance. Hydraulic cylinders were robust and somewhat reliable but required pressurized oil (leading to fluid leaks and environmental contamination) and significant maintenance. Evaluating industry demands, Exlar engineers realized finding a replacement for fluid power systems and their inherent flaws was a necessity. After several iterations and painstaking effort, they achieved their goals and developed a “breakthrough solution”

Q. Who was the first customer to utilize the inverted roller screw in 1993?

A. Tetra Pak

Exlar developed an all stainless steel inverted roller screw integrated with a servo motor specifically for Tetra Pak, a world leader in liquid packaging products. They needed to replace a cam operated liquid carton filling machine for yogurt dispensing. Exlar developed the prototype in December of 1992 and soon after receiving the prototype Tetra Pak ordered 40 more. Tetra Pak was able to achieve better control, precision, and longer life while reducing the maintenance their machines would require.

They continue to be one of Exlar’s top food and beverage / packaging customers today.

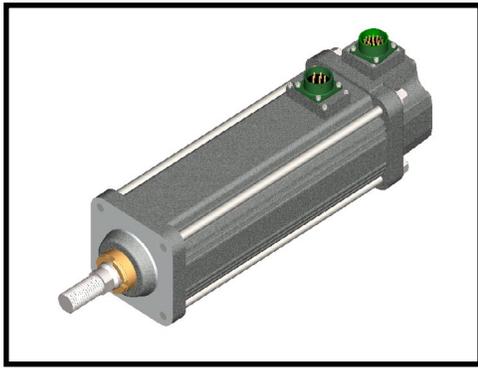


Original Tetra Pak Integrated Motor/Actuators

About Tetra Pak

Tetra Pak is a world-leading food processing and packaging solutions company. Working closely with customers and suppliers, Tetra Pak provides safe, innovative and environmentally sound products that each day meet the needs of hundreds of millions of people in more than 160 countries.

Not only did Tetra Pak collaborate with Exlar to innovate and change automation worldwide with the first integrated inverted roller screw and motor application, they also continue to incorporate Exlar actuators in their modern-day packaging processes.



GS Series Actuators

Q. What was Exlar's first product launch?

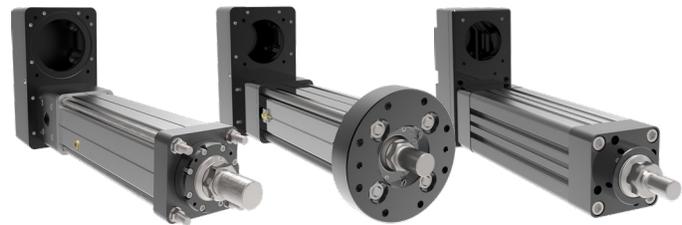
A. GS Series

Exlar's very first product to launch was what we call the GS now. It was developed to integrate an inverted roller screw and a servo motor in one compact unit. Rollers assembled around the actuator's extending rod follow threads which are precisely machined on the inside surface of the actuator's hollow armature. Linear motion is produced in precise synchronization with the armature rotation. Because this roller screw mechanism has an inherently larger cumulative contact surface, these actuators had a much longer working life, and could handle heavier loads at higher speeds than was possible from a similarly sized unit built around a ball screw system.

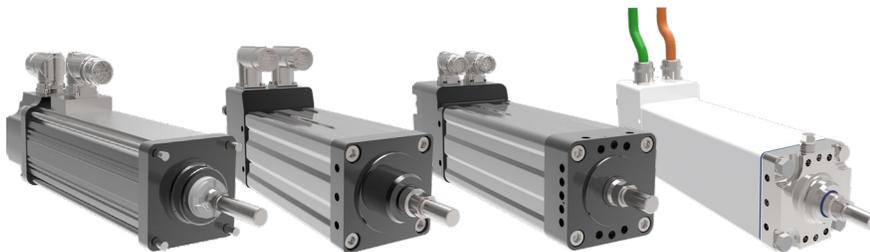
Q. What current Exlar products build on 30 years of success by integrating inverted roller screw technology, powering Exlar to be "Still Rolling" today?

A. GTX Series and Tritex Series

Today, Exlar has 3 primary product lines with multiple products in each. We have our Universal Linear Actuators (FTX, FTP, and KX), electric actuators with roller screw technology.



FTX Series FTP Series KX Series



GSX Series GTX Series GTW Series GTF Series

We have our Integrated Motor | Actuators (GSX, GTX, GTW, GTF), combining an inverted roller screw and a servo motor in one.

Finally, we offer our Intelligent Drive | Motor | Actuators (Tritex II, Tritex TTX, and Tritex EVA), decentralized actuator solutions that incorporate an on-board servo drive, a servo motor, and an inverted roller screw.



Tritex II Linear Tritex II Rotary TTX Series EVA Series